

- a. Integument of abdomen coriaceous, wrinkled, sparsely hairy, covered dorsally with short spines, and deeply impressed posteriorly with sigillæ. Eyes like those of *Idiops*, the anterior laterals separated by a space that is less than their diameter *Idiosoma*, Auss.
- b. Integument of abdomen covered with longish hairs, with sigillæ inconspicuous.
- a'. Eyes of posterior row procurved, the laterals in advance of the medians; the distance between the anterior laterals and anterior medians not very unequal; long spines intermixed with the hairs on the dorsal side of the abdomen *Anidiops*, nov.
- b'. Eyes of posterior line recurved, the laterals behind the medians; distance between anterior laterals far greater than distance between anterior medians.
- a². Quadrangle formed by anterior laterals and posterior medians a little wider behind than in front and a little wider than long; posterior line of eyes about three times as wide as the anterior line *Eucyrtops*, nov.
- b². Quadrangle formed by anterior laterals and posterior medians a little wider in front than behind and considerably wider than long; posterior line of eyes about twice as wide as the anterior line *Aganippe*, Cambr.

X.—*Descriptions of Two new Species of Scorpions from East Africa.* By R. I. POCKOCK.

AMONGST a small assortment of Arachnids from Kota Kota, west coast of Nyasa, recently brought to the British Museum by Mr. R. Webb, and collected by the members of the Universities' Mission, there are representatives of two new species of scorpions, which are here described. The remaining specimens seem to be referable to the following species:—*Nephila malabarensis*, Walck., *Nephila hymenæa*, Gerst., *Palystes* (immature ♀), *Euprostenops** (immature ♀), *Solpuga paludicola*, Poc., and *Opisthophthalmus glabrifrons*, Pet.

Opisthacanthus rugiceps, sp. n.

Species with the legs and vesicle ochre-yellow, and falling under section *U*² of the table of South-African species of *Opisthacanthus* published in the Ann. & Mag. Nat. Hist. (6)

* Nom. nov. for *Podophthalma*, Capello, 1866, preoccupied at least twice over.

xvii. pp. 314-315, April 1896, and related to *O. rugulosus*, from Ishiromo, Nyasaland, there described—a species which it resembles in having the trunk thickly granular above. The two, however, may be recognized as follows :—

- a. Median eyes small, not elevated; upperside of the brachium more closely and less coarsely granular, the crest bounding it posteriorly weak; the sculpturing of the upper surface of the hand finer, less reticulated, more definitely granular; upperside of the fourth and fifth segments of the tail distinctly granular; none of the caudal segments with distinctly carinate upper edges; spine-armature of tarsi 3 in front, 4 behind, with a bristle at the distal angle; pectinal teeth 6 in ♂; legs piceous *rugulosus*, Poc.
- b. Median eyes larger and elevated on a low tubercle; upperside of brachium covered with tuberculiform granules, and bounded behind by a strong tubercular keel; upperside of hand covered with a pattern of distinct ridges, formed by the anastomosis of granuliform tubercles; these tubercles distinct at the base of the finger; upperside of fourth and fifth caudal segments not granular, the former segment as well as the third with distinctly carinate and denticulate upper edges; spine-armature of tarsi 2 in front and 3 behind, with a bristle at the distal angle; pectinal teeth 10; legs ochraceous *rugiceps*, sp. n.

Measurements in millimetres.—Total length 78; length of carapace 11·5, of tail 40; width of hand 8·5; length of hand-back 10, of movable digit 11.

Loc. Kota Kota, west coast of Lake Nyasa (Universities' Mission). A single male example was obtained.

Had it not been for Kraepelin's statement to the effect that the species from the Transvaal that was described as *O. lævipes* is identical with *O. asper* of Peters, I should without hesitation have applied Peters's name to the form that was described as new; for not only is the name *asper* as appropriate for this form as it is inappropriate for *lævipes*, but, in addition, the locality Tete, on the Zambesi, whence *asper* was obtained, is twice the distance from the Transvaal that it is from Kota Kota. *O. rugiceps*, though resembling *O. asper* (*lævipes*) in the number of its pectinal teeth, differs in having the terga granular, the hand and brachium also coarsely sculptured, and the femora of the legs weakly granular externally. In *asper* (*lævipes*), moreover, the distal angle of the tarsus is armed with a spine, not with a bristle as in *rugiceps*.

Uroplectes xanthogrammus, sp. n.

♀. *Colour* yellow and black; interocular area of carapace black, the black extending posteriorly past the ocular tubercle to the posterior border, which is further adorned with black patches corresponding to those on the terga; lateral margin black; terga with black lateral margins and a posteriorly widened black band on each side of the yellow middle line; the area between the margin and the black band often largely infuscate, especially on the third, fourth, and fifth segments; the seventh segment with only traces of the black bands; tail with fourth and fifth segments and the vesicle infuscate, the lower surface of the first three segments with traces of black bands, which are represented by a pair of posterior spots on the first and three anterior and three posterior spots on the second and third, those on the third connected by longitudinal indistinct bands; legs flavous, the femora and patella infuscate in front below; palpi mostly flavous, the basal half of the digits black, with sometimes indistinct fuscous spots on the hand and brachium; in one specimen there is a deep pigment-spot on the base of the humerus behind, and another on the base of the brachium in front; mandibles covered with a network of fuscous lines; lower surface of trunk entirely pale.

Carapace finely, *terga* more coarsely granular, especially posteriorly. *Tail* keelless, with at most, perhaps, traces of an upper keel on the first segment, the upper keels on the rest represented posteriorly by a granule, the sides and lower surface coarsely punctured; sulcus on upperside of all the segments granular; vesicle smooth, coarsely punctured, with a distinct tubercular tooth below the aculeus; superior edges of the fifth caudal segment angular behind.

Chelæ with brachium smooth and punctured above, hand about as wide as the brachium, smooth; movable digit twice the length of the hand-back; with 12 rows of teeth, the eighth tooth (fifth from the apex) of the inner row on a level with the tip of the adjacent series of the middle line.

Pectines with 18 or 19 teeth, the basal not enlarged.

♂. Like the female, but with tail longer and thinner, about seven instead of six times the length of the carapace; vesicle more oval; hand a little longer, with from 2 to 5 spines on its inner side at the base of the immovable digit; pectines enlarged, with 18 teeth.

Measurements in millimetres.—Total length of female 43, of carapace 4, of tail 24. Length of male 32, of carapace 3, of tail 22.5.

Loc. Kota Kota, west coast of Nyasa (Universities' Mission). Five females and one male.

So far as my knowledge of the genus extends, this is a very distinct species, falling partly into section 2 and partly into section 3 of the table of South-African species of *Uroplectes* published in Ann. & Mag. Nat. Hist (6) xvii., May 1896. It approaches *occidentalis*, *vittatus*, and *Fischeri* in colour and in having the caudal segments smooth, punctured, and keelless; and *olivaceus*, *triangulifer*, and *chlorodermus* in having the hand of the male spinous internally; further approaching *triangulifer* and *Marshalli* in having the basal pectinal tooth of normal size in the female.

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

November 18, 1896.—Dr. Henry Hicks, F.R.S.,
President, in the Chair.

The following communications were read:—

1. 'On *Cycadeoidea gigantea*, a new Cycadean Stem from the Isle of Portland.' By A. C. Seward, Esq., M.A., F.G.S.

The specimen described by the Author was discovered a short time since in one of the Purbeck Dirt-beds, and is now in the Fossil Plant gallery of the British Museum. In the absence of any fructification, Buckland's generic name of *Cycadeoidea* is chosen in preference to *Bennettites*, although in many respects the Portland stem is identical with *Bennettites Gibsonianus*. Externally, the surface is covered with rhomboidal areas separated from one another by a projecting framework consisting of the silicified ramental tissue, which thickly clothed the bases of the petioles. The peripheral portion of the stem afforded thin sections from which it was possible to investigate the anatomical structure of the leaf-bases and ramental scales. Internally, the wood- and pith-tissues have been entirely replaced by inorganic material. The Author calls attention to the preservation of a prominent apical bud covered with narrow bud-scales and capped by a mass of ramenta. No indication is found of a lateral inflorescence such as characterizes *Bennettites Gibsonianus*, and the negative evidence suggests the occurrence of terminal reproductive structures. A comparison of this fossil with recent Cycads and Ferns brings out many points of close agreement with the former, and as regards the structure of the ramenta, evidence is afforded of an interesting survival of the closer resemblance which formerly existed between Cycadean and Fern-like plants. The stem is named *Cycadeoidea gigantea*.

2. 'The Fauna of the Keisley Limestone.—Part II. Conclusion.' By F. R. C. Reed, Esq., M.A., F.G.S.

The Author describes the ostracoda, brachiopoda, mollusca, echinodermata, and actinozoa of the Keisley Limestone. He gives a list of